# TOWN OF DAVIE TOWN COUNCIL AGENDA REPORT

**TO:** Mayor and Councilmembers

**FROM/PHONE:** Ken Cohen, Acting Town Administrator/954-797-1030

**PREPARED BY:** Barbara McDaniel, MMC, Assistant Town Clerk

**SUBJECT:** Ordinance

**AFFECTED DISTRICT:** Townwide

**TITLE OF AGENDA ITEM:** AN ORDINANCE OF THE TOWN OF DAVIE, FLORIDA, AMENDING THE TOWN CODE, CHAPTER 2, ARTICLE III, SECTION 2-41, ENTITLED "QUALIFYING DISTRICT BOUNDARIES" BY REDELINEATING GEOGRAPHICAL QUALIFYING DISTRICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

**REPORT IN BRIEF:** On October 20th, Council established a District Boundaries Review Committee and subsequently appointed ten members. The Town retained GeoWeb Consult Services to aid in the Committee's review of the Town's district boundaries, which provided 4 options. The Committee met on a number of occasions and developed an additional 11 options. At the Committee's last meeting held on November 6th, the Committee approved to move three forward. In addition to the three options, GeoWeb will provide Council with two additional scenarios.

PREVIOUS ACTIONS: n/a

**CONCURRENCES:** The District Boundaries Review Committee approved to move three scenarios for Council consideration.

FISCAL IMPACT: n/a

**RECOMMENDATION(S):** Motion to approve one of the options provided.

**Attachment(s):** Ordinance and report from GeoWeb Consult Services

Rejected scenarios can be found on the Town's website at http://www.geoweb-consult-services.com/DavieBoundaryStudy.html

ORDINANCE NO.
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AN ORDINANCE OF THE TOWN OF DAVIE, FLORIDA, AMENDING THE TOWN CODE, CHAPTER 2, ARTICLE III, SECTION 2-41, ENTITLED "QUALIFYING DISTRICT BOUNDARIES" BY REDELINEATING GEOGRAPHICAL QUALIFYING DISTRICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town has satisfied the requirements of its Charter, Section 7(A)(2), which requires that district boundaries be reviewed by a Council-appointed committee upon the occurrence of certain events; and

WHEREAS, the Town of Davie retained GeoWeb Consult Services for the purpose of conducting a study to provide recommendations for the redelineation of the Town's qualifying district boundaries in reasonably equal areas of population and geographic size; and

WHEREAS, as a result of the study, GeoWeb Consult Services submitted seven options for redelineating the district boundaries to the District Boundaries Review Committee; and

Whereas, the District Boundaries Review Committee developed 11 options; and

Whereas, after a number of meetings, the Committee reduced the number of options to three for submittal to the Town Council and GeoWeb Consult Services submitting two options.

WHEREAS, five options are being submitted to the Town Council (as attached hereto) with the appropriate redelineation consistent with the requirements of the Town Charter.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA:

<u>SECTION 1</u>. That Davie Town Code Chapter 2, Article III, Section 2-41, entitled "Qualifying District Boundaries," is hereby amended to include Option :

### Sec. 2-41. Qualifying District Boundaries.

The boundaries of the four (4) geographical districts from which a candidate for the office of councilmember shall qualify as provided for in Section 7(A) of the town's Charter, are as follows:

The boundary of District 1 begins at the intersection of I-595/SR 84 corridor and Davie Road, thence southerly on Davie Road to Davie Road Extension, thence southwesterly along Davie Road

Extension to University Drive. This district includes all lands east of this boundary and within the corporate limits of the Town of Davie.

The boundary of District 2 begins at the intersection of I-595/SR 84 corridor and Davie Road thence southerly on Davie Road to Davie Road Extension, thence southwesterly along Davie Road Extension to its point of intersection with the south line of Section 4, Township 51 South, Range 41 East; thence Westerly along said South line to an intersection with the West line of that certain 100 foot canal reservation whose easterly line is contiguous with the westerly right-of-way line of University Drive; thence Northerly along said West line to an intersection with the south line of Tract 62 of said section 4, of "The Everglades Sugar and Land Company's Subdivision" (Plat Book 2, Page 75, Dade County Records); thence Westerly along said South line to the Southwest corner of said Tract 62; thence Northerly along the West line of said Tract 62, to the Northwest corner of Tract 62 thence Easterly along the North line of said Tract 62 to the West line of said 100 foot canal reservation; thence northerly along the westerly line of said canal reservation to its northern terminus; thence northeasterly along the northerly line of said canal reservation and a prolongation thereof to a point of intersection with the easterly right-of-way line of University Drive; thence Southerly along said easterly right-of-way line to an intersection with a line being parallel with and 150.00 feet West of the East line of said Section 4; thence Northerly along said parallel line to a point of intersection with the southerly right-of-way line of Stirling Road; thence westerly along said southerly right-of-way line to a point of intersection with the east line of the west one-half (W 1/2) of Tract 9 thence Southerly along the East line of the West one-half (W 1/2) of said Tract 9 to the South line of said Tract 9; thence Westerly along the South line of Tracts 9, 10 and 11 of said Section 4 to an intersection of the West line of the East one-half (E 1/2) of said Tract 11 thence Northerly along the West line of the East one-half (E 1/2) of said Tract 11 and its Northerly extension to the South line of Section 33, Township 50 South, Range 41 East; thence Westerly along the South line of said Section 33 to the Southwest corner of the East one-half (E 1/2) of the West one-half (W 1/2) of said Section 33, thence Northerly along the West line of the East one-half (E 1/2) of the West one-half (W 1/2) of said Section 33 until the point of intersection with Pine Island Road and Griffin Road, thence easterly on Griffin Road to University Drive, thence

northerly on University Drive to Southwest 36 Street, thence westerly on Southwest 36 street extended to Pine Island Road, thence Northerly on Pine Island Road to the town's corporate limits.

The boundary of District 3 begins at the intersection of I-595/SR-84 corridor and Pine Island Road, thence southerly on Pine Island Road to Southwest 36 Street extended, thence easterly to University Drive, thence southerly to Southwest 45 Street, thence westerly along Southwest 45 Street to Flamingo Road, thence northerly on Flamingo Road to Southwest 26 Street, thence westerly to Southwest 130 Avenue, thence northerly along Southwest 130 Avenue to the town's corporate limits.

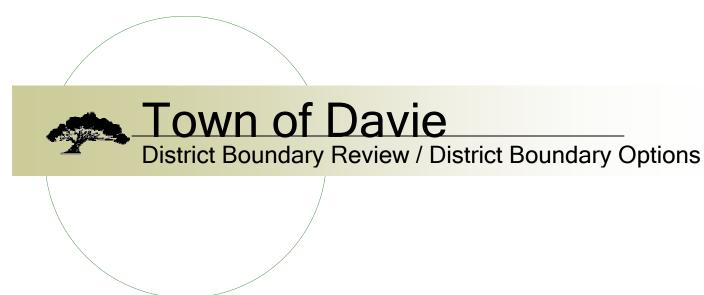
The boundary of District 4 begins at the intersection of I-595/SR 84 corridor and Southwest 130 Avenue, thence southerly on Southwest 130 Avenue to Southwest 26 Street, thence easterly on Southwest 26 Street to Flamingo Road, thence southerly to Southwest 45 Street. This district encompasses all lands west and south of this boundary and within the Town of Davie's corporate limits.

<u>SECTION 2</u>. All Ordinances or parts of Ordinances in conflict herewith are to the extent of such conflict hereby repealed.

SECTION 3. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held invalid or unconstitutional by any Court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portion of this Ordinance.

SECTION 4. This Ordinance shall take effect immediately upon its passage and adoption.

PASSED ON FIRST REA	ADING THIS	DAY OF	, 2006	
PASSED ON SECOND I	READING THIS	DAY OF	, 2006	
		MAYOR/0	COUNCILMEMBER	
ATTEST:		mir ord		
TOWN CLERK				
APPROVED THIS	DAYOF	2006		



### DRAFT VERSION FOR NOVEMBER 15, 2006 TOWN COUNCIL MEETING

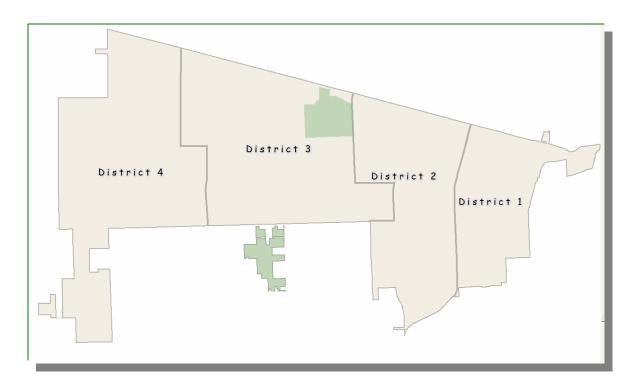






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District Boundary Review / District Boundary Options

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### **Executive Summary**

In pursuant to the Voting Rights Act and in accordance with the Town of Davie Charter, Section (7) (a), the Town Council is required to review its four Town Council districts to determine if they are equal in population as practicable.

In accordance with Section 7(A) (2) of the Town of Davie Charter, the Town's district boundaries must be reviewed based upon the following set of requirements:

- 1) when at least the passage of five (5) years since the previous review of the town's boundaries occurred, or
- 2) when the population mean for a council member district deviates by more than 10 percent of the overall mean population of the town, or
- 3) when the town's geographical boundaries changes by ten (10) percent or more, or
- 4) when a single annexation causes the population of the town to increase by five (5) percent or more.

To review the existing Town Council district boundaries to determine if they need to be reconfigured, on September 20, 2006, the Council approved GEOWeb to review the existing boundaries, prepare redistricting options, and work jointly with the District Boundary Review Committee as appointed by Council members. Submittal of proposed options was to be completed by no later than December 1, 2006.

The findings of the review within this document revealed the following:

- Town Council boundaries haven't been reviewed since 1999
- Existing Town Council boundaries either greatly exceed or fall below the population mean
- Single annexation of Pine Island Ridge and United Ranches caused the Town's population to increase by more than five (5) percent

Based upon these findings, several proposed district scenarios were created by both the consultant, GEOWeb and the District Boundary Review Committee. This document presents four proposed district boundary scenarios. Two of the four scenarios (Scenario 8 and Scenario 9) were developed by GEOWeb. The remaining two scenarios were created by the District Boundary Review Committee (Scenario 6 and Scenario 10). Three of the four proposed district boundary scenarios in this document were endorsed by the District Boundary Review Committee (Scenario 6, Scenario 8, and Scenario 10). GEOWeb recommends that Scenario 9 be considered as a viable alternative as well.

This document presents the findings based upon the review of the existing district boundaries, identifies the need for reconfiguration of the existing boundaries, and presents the scenarios developed by both GEOWeb and the District Boundary Review Committee.





### Existing District Boundary Review Findings

Based upon the requirements set forth by the Town Charter, GEOWeb reviewed the existing (1999 approved) Town Council boundaries.

- 1. Time Period of Review The adoption of the existing Town Council Districts was approved in December 1999. Therefore, under this requirement boundary review was considered and recommended by the Town Administration to move onto the Town Council Public Hearing Agenda in July 2006.
- 2. District Population Mean must not deviate greater than 10 percent of the Town Population Mean To determine the population mean deviation for each Town Council District, several demographic analyses were conducted.

First, utilizing the Census 2000 Redistricting (Public Law 94-171) Summary File which provides population counts for all persons, a deviation analysis was performed.

Public Law 94-171, enacted in 1975, directs the Census Bureau to provide redistricting data needed by the 50 states for their use in redrawing districts of the United States Congress and state legislatures.

As shown in Table 1, the population mean for each Council District exceeds or falls below the 10 percent threshold.

Table 1. Public Law 94-171: Redistricting
Census 2000 - Demographic Profile -
Prior to Sept 15th Annexation

	P0010001				
DISTRICT	2000 Census (PL94-171)				
	Total	%	Deviation		
District 1	11,945	16%	-37%		
District 2	21,397	28%	13%		
District 3	21,410	28%	13%		
District 4	21,108	28%	11%		
Total	75,860				
Mean	18,965				

However, to analyze the most current population estimates, GEOWeb utilized the Broward County Population Forecasting Model based upon Traffic Analysis Zones. (TAZ). This model utilizes the TAZ since their geographic areas are relatively consistent in size and are the basis for transportation and water supply planning. Through the City/County Population Forecasting Roundtable, a cooperative effort between the County and its municipalities, forecasts were completed for all municipalities in Broward County. The model is a cohort survival model consisting of two major parts, natural increase and net migration. Natural increase is the difference between the number of births and the number of deaths. Net migration equals the net number of people moving out of the County.





Broward County provided GEOWeb with the 2005 TAZ Population Forecast as the best available data source for assessing demographics within the Town of Davie. To review the potential population growth in 2006, GEOWeb acquired additional information in regards to Certificate of Occupancy (COs) and development projects that have been completed.

As shown in Table 2, the population mean based upon the 2005/06 population estimates for each Council District exceeds or falls below the 10 percent threshold.

Table 2. Existing Districts, 1999 Using Population Forecast 2005/06									
Districts	Pop	oulation 20	06	Dwelling Units	Households	TAZs			
			Deviation						
Existing	Total	% of Total	of Mean	#	#	#			
District 1	13,721	16%	-36%	6,308	5,457	14			
District 2	23,407	27%	9%	10,872	9,867	12			
District 3	23,125	27%	7%	12,560	11,678	14			
District 4	26,035	30%	21%	8,730	8,361	17			
TOTAL	86,288			38,470	35,363	57			
Mean	21,572								

Ft. Lauderdale, FL 33301. Preliminary Population Forecasts by Traffic Analysis Zones (TAZ-Level 902). 2006 Certificate of Occupancy provided by Planning Department. Town of Davie.

Note - TAZs that cross geographic boundaries were estimated by determining the number of parcels based upon Use Code (Property Appraiser's Office), Zoning Designation, Certificate of Occupancy, and Aerials. Note: The population counts do not include United Ranches or Pine Island Ridge.

3. Geographic Areas – To estimate the geographic area of the town before and after the September 15, 2006 annexation, GEOWeb utilized Broward County's Geographic Information Systems (GIS) mapping layers of the Town Table 3. Geographic Areas. boundaries before and after annexation. As shown in Table 3, the **Town Boundary** geographic boundaries did not exceed the 10 percent after Pine

Prior to Sept 15, 2006 Island Ridge and United Ranches areas were incorporated into

After Sept 15, 2006 22,731 Percent Change

Acres

21,861

It should be noted this is an estimate of the measurement of area since GIS and not surveying measures were used. If percent changes were closer to the 10 percent margin, it would have been recommended to utilize surveying accuracy.



the Town.





4. Annexation – As shown in Table 4, the population forecast prior to annexation was 86,288. Due to the annexation of the Pine Island Ridge neighborhood as well as the addition of United Ranches the population increase was greater than the five (5) percent threshold.

Table 4. Existing Districts / Annexation Areas								
Population Forecast - 2005 TAZ								
	Population							
Districts	2006	Units	Households					
Existing	Total	#	#					
District 1	13,721	6,308	5,457					
District 2	23,407	10,872	9,867					
District 3	23,125	12,560	11,678					
District 4	26,035	8,730	8,361					
District Totals	86,288	38,470	35,363					
Pine Island Ridge	5,196	3199	2780					
United Ranches Area	947	286	275					
Annexation Total	6,143	3485	3055					
OVERALL TOTALS	92,431							
Existing Town	93%							
Annexation	7%							

### **Development of Proposed Scenarios**

Based upon the significant amount of changes to these requirements per the Town Charter, GEOWeb prepared redistricting options for the Town of Davie by applying the criteria as set forth by the Town Charter:

- 1. Population within each district is within +/- ten (10) percent of the mean of the total population for four districts.
- 2. District boundaries are contiguous and compact.
- 3. District boundaries coincide as practically as possible with district geographic features.
- 4. Proposed district boundaries respect existing district boundaries.
- 5. "Communities of interest" such as ethnic enclaves or homeowner associations are not divided intentionally.

GEOWeb worked in cooperation with the Town Council appointed District Boundary Review Committee to review proposed options developed by GEOWeb. The task of the Committee would be to review and recommend whether these scenarios should be endorsed or not by the Committee for presentation to the Town Council at the first hearing meeting.

In addition the Committee would be allowed to create, review, approve or reject options developed by Committee members. Those options approved were recommended to be submitted at the first public hearing meeting as well.

Table 5. District Review Committee Meeting Schedule							
Date of Meeting	Topic						
9/26/2006	Introductions/Explanation of Redistricting Process/Documentation Distribution/Proposed Methodology						
10/10/2006	Presentation of Initial Data Findings/Existing Population Information/Population Forecasting						
10/23/2006	Workshop: Review and Creation of Redistricting Proposals from GEOWeb and from the District Review Committee members						
11/6/2006	Workshop: Revision, Submittal, and Review of Redistricting Scenarios/Voting on final Redistricting Proposals to bring before the Town Council						







As shown in Table 5, working in cooperation with the District Boundary Review Committee, there were approximately four (4) Committee meetings to review the findings of the existing district boundaries, educate the members on the redistricting process, and discuss procedures for creating, reviewing, and deciding which scenarios should be presented to the Town Council on November 15, 2006.

The first meeting was held on September 26<sup>th</sup> with introductions of District Review Committee members and the consultant, GEOWeb. In accordance with both the Voting Rights Act and the Town Charter, GEOWeb explained how the redistricting process should work and explained the criteria set forth within the Town Charter. Additionally, GEOWeb explained the next steps that needed to be performed which included data gathering and analysis.

The second meeting was held on October 10<sup>th</sup> with explanations of the data methodology and analysis. In particular, GEOWeb explained how population data numbers would be analyzed and what the estimated 2006 population for the Town of Davie is with and without the new annexed communities.

Prior to the October 23<sup>rd</sup> meeting, GEOWeb created several redistricting options. Additionally, one option was received from a member of the District Review Committee. At the meeting of October 23<sup>rd</sup>, the redistricting options were presented as well as conducting a workshop where District Review Committee members could work together to create options of their own. The options were then voted on to decide whether they would move forward for additional consideration at the next meeting or if they should not because it was not a viable option. Furthermore, a decision was made to give District Review Committee members the opportunity to create new options/scenarios prior to the next meeting. GEOWeb also would produce more scenarios prior to the next meeting.

At the November  $6^{th}$  meeting all options were reviewed and discussed. At this meeting the options were narrowed down from 12 proposed options or scenarios to 3 scenarios. Scenarios 6, 8, & 10 were endorsed by the District Review Committee to be presented to the Town Council as viable redistricting options. Additionally, GEOWeb re-reviewed all of the scenarios and determined that an additional scenario, Scenario 9, should be submitted to the Town Council for their consideration as a viable option.





### **Recommended Scenarios**

Scenario 8 - Least Change Option

In an effort to improve the population distribution more evenly among the Districts, GEOWeb developed a 'least change' option to minimize the change of the district boundaries in order to reduce the population that would be reassigned to a new proposed district.

One of the major challenges in minimizing the impact on the population in terms of assigning these residents to a new district was the issue that the existing population in District 1 fell dramatically below the population mean. Therefore, a significant population increase to District 1 was required to meet the Charter requirement regarding population distribution. This option best represents the minimum amount of impact to the reassignment of residents to another district. The total population shift in this scenario is 11,510.

### <u>Criteria 1 – Population Mean Deviation</u>

The population for each proposed District falls within the acceptable +/- 10 percent threshold. In fact, the deviation of the population mean for all the proposed District boundaries falls within +/-5 percent.

Table 6. Proposed Scenario 8: Population Distribution and Deviation of Population Mean

PROPOSED SCENARIO 8								
Districts	P	opulation 200	6					
Proposed District Options	Total	% of Total	Deviation of Mean					
District 1	22,479	24%	-3%					
District 2	22,423	24%	-3%					
District 3	24,185	26%	5%					
District 4	23,344	25%	1%					
TOTAL Mean	92,431 23,108	[(District Population	n)÷ (∑ Mean)]-1					

### Criteria 2 – Contiguous & Compactness

Compactness can be defined based upon the area of each district as well as communities of common interest where a community of interest resides within its respective district or adjacent to another district. Adjacent boundaries would be the Traffic Analysis Zones (TAZs) that are next to a district that these TAZs may be assigned to in order to improve the population distribution.







As shown in the Table 7, when reassigning TAZs from District 2 to District 1, approximately six (6) TAZs were impacted containing 8,758 persons. Of the six (6) TAZs, three of them were deemed 'compact' meaning these TAZs are adjacent to the existing district boundaries, impacting 4,907 persons.

Three TAZs were deemed non-compact, meaning they are not directly adjacent to existing district boundaries. These non-compact TAZs impact 3,851 persons. All the TAZs are contiguous in relationship to the proposed boundaries for District 1.

Based upon reviewing all proposed scenarios, Scenario 8 provides the 'least change' in terms of reassigning populations to different proposed districts. In this scenario, approximately 3,851 persons reside in 'non-compact' TAZs although they are contiguous in nature.

Table 7. Scenario 8: Compact Analysis

	SCENARIO 8 - COMPACTNESS ANALYSIS										
Existing		Proposed	Impacted TAZs		# of TAZs		Compact Population		Non- Compact Population		Impacted Population
	District 2	District 1	556, 557, 558,	559, 567,887	6	556,567,625	4,907	557,568,887	3,851	44%	8,758
	District 3	District 2		569	1	569	2,305		0	0%	2,305
	District 3	District 4		59201	1	59201	447	0	0	0%	447
			Impacted TAZs	;	POP.						
Pine Isla	and Ridge	District 2		560	5469						
United	Ranches	District 3		615	947						

## <u>Criteria 3 – District Boundaries coincide as practically as possible with distinct geographic boundaries.</u>

Since the Traffic Analysis Zones was used as the geographic areas and no further TAZs were split, the proposed district boundaries in Scenario 8 coincide as practically as possible with distinct geographic boundaries such as interstates, highways, and local streets.

### Criteria 4 – Proposed District Boundaries respect existing District Boundaries

This option provides the 'least change' to existing district boundaries by shifting population between District 1 and District 2 more evenly while minimizing the reassignment of non-compact TAZs to a new District.

As for the changes between District 3 and District 2, only a single compact TAZ was reassigned. The same holds true for changes between District 3 and District 4.







### Criteria 5 – Communities of Interest

Communities of interest were defined as residential communities via homeowners association and/or subdivision. As for ethnic enclaves, GEOWeb utilized the Census 2000 Redistricting (Public Law 94-171) Summary File which included racial and ethnic information at the census block level. Based upon reviewing the racial and ethnic demographics provided in Appendix A, there were no identifiable ethnic enclaves since Hispanic population (20% of total) and other minority populations (5% of total) are dispersed throughout the districts within the Town of Davie.

This option provides the least change since it does not split any communities of interest which include homeowner associations, subdivisions, and 'ethnic' enclaves. Refer to Figure 1.

The District Boundary Review Committee endorsed Scenario 8 as an acceptable option to be presented to the Town Council.

Based upon the minimal amount of change, while evenly distributing the population among the districts, Scenario 8 received approval by the District Boundary Review Committee; it is therefore a recommended scenario by GEOWeb.





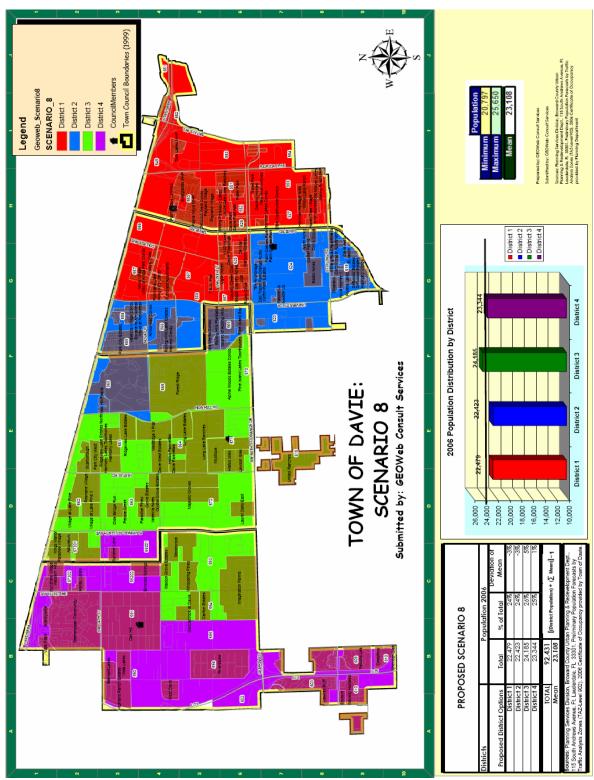


Figure 1. Proposed Option: Scenario 8





### Scenario 9 – Minimum Change Option

This scenario, like Scenario 8, takes into consideration the goal of evenly distributing the population amongst the Districts. The 'minimum' change option, Scenario 9, created by GEOWeb, is only a slight variation from Scenario 8. The key difference is total population shifted from one District to another. In Scenario 8, the compact analysis (Table 7) revealed that the total shift in population is 11,510. In Scenario 9, the compact analysis (Table 9) revealed that a total population shift of 14,492 would occur, therefore we deemed this Scenario a 'minimum' change as opposed to a 'least' change option.

### <u>Criteria 1 – Population Mean Deviation</u>

As shown in Table 8, population for each proposed District falls within the acceptable +/- 10 percent threshold. In fact, the deviation for all but one of the Districts falls within +/- 5 percent. District 3 is 9 percent, another reason why this scenario was deemed 'minimum' change rather than 'least'.

Table 8. Proposed Scenario 9: Population Distribution and Deviation of Population Mean

PROPOSED SCENARIO 9								
Districts Population 2006								
Proposed District Options	Total	% of Total	Deviation of Mean					
District 1	22,284	24%	-4%					
District 2	22,618	24%	-2%					
District 3	25,118	27%	9%					
District 4	22,411	24%	-3%					
TOTAL	TOTAL 92,431 [(District Population) * (Σ Mean)] -1							
Mean	23,108	[(District Population	n)+ (Z wean)]-1					

#### Criteria 2 – Contiguous & Compactness

Compactness is defined as communities of common interest where a community of interest resides within its respective district or adjacent to another district. Adjacent boundaries would be the Traffic Analysis Zones (TAZs) that are next to a district that these TAZs may be assigned to in order to improve the population distribution.







As shown in Table 9, when reassigning TAZs from District 2 to District 1, approximately five (5) TAZs were impacted containing 8,563 persons. Of the five (5) TAZs, three of them were deemed 'compact' meaning these TAZs are adjacent to the exiting District boundaries, impacting 4,907 persons. Two (2) TAZs were deemed non-compact, meaning they are not directly adjacent to existing district boundaries. These non-compact TAZs, impacting 3,656 persons, is slightly less than Scenario 8. All TAZs are contiguous in relationship to the proposed boundaries for District 1.

Based upon reviewing all proposed scenarios, Scenario 9 provides the 'minimum change' in terms of reassigning populations to different districts. Again, Scenario 8 redistributed a total of 11, 510 persons while Scenario 9 redistributes a total of 14,492. In this scenario, approximately 3,656 persons reside in 'non-compact' TAZs although they are contiguous in nature.

Table 9. Scenario 9: Compactness Analysis

	SCENARIO 9 - COMPACTNESS ANALYSIS								
Existing	Proposed	Impacted TAZs	# of TAZs	Compact TAZ	Compact Populatio n		Non- Compact Populatio n	%	Impacted Population
	District 2 District 1	556,557,567,568,625	5	556,567,625	4,907	557,568	3,656	43%	8,563
	District 3 District 2	569	1	569	2,305			0%	2,305
	District 4 District 3	57302		57302	3624	0	0	0%	3,624
		Impacted TAZs	POP.						
	and Ridge District 2	560							
United	d Ranches District 3	615	947						

### <u>Criteria 3 – District Boundaries coincide as practically as possible with distinct geographic boundaries.</u>

Since the Traffic Analysis Zones were used as the geographic areas and no further TAZs were split, the proposed district boundaries in Scenario 9 coincide as practically as possible with distinct geographic boundaries such as interstates, highways, and local streets.

### Criteria 4 – Proposed District Boundaries respect existing District Boundaries

This option provides minimum changes to existing district boundaries while shifting population between District 1 and District 2 more evenly while minimizing the reassignment of non-compact TAZs to a new District. As for the changes between District 3 and District 2, only a single compact TAZ was reassigned. The same holds true for changes between District 3 and District 4.







### Criteria 5 – Communities of Interest

Communities of interest were defined as residential communities via homeowners association and/or subdivision. As for ethnic enclaves, GEOWeb utilized Census 2000 Redistricting (Public Law 94-171) Summary File which included racial and ethnic information at the census block level. Based upon reviewing the racial and ethnic demographics provided in Appendix A, there were no identifiable ethnic enclave since Hispanic population (20% of total) and other minority populations (5% of total) are dispersed throughout the districts within the Town of Davie.

This option provides minimum change since it does not split any communities of interest which include homeowner associations, subdivisions, and 'ethnic' enclaves. Refer to Figure 2.

The District Boundary Review Committee did not endorse Scenario 9 as an acceptable option to be presented to Town Council. GEOWeb is submitting this scenario since we deem it to be a minimum change, in terms of population redistribution, compactness & contiguousness, geographic boundary impact, respectfulness of existing district boundaries, and impact to communities of interest.

Based upon the minimal amount of change while evenly distributing the population among the districts it is therefore a recommended scenario by GEOWeb.





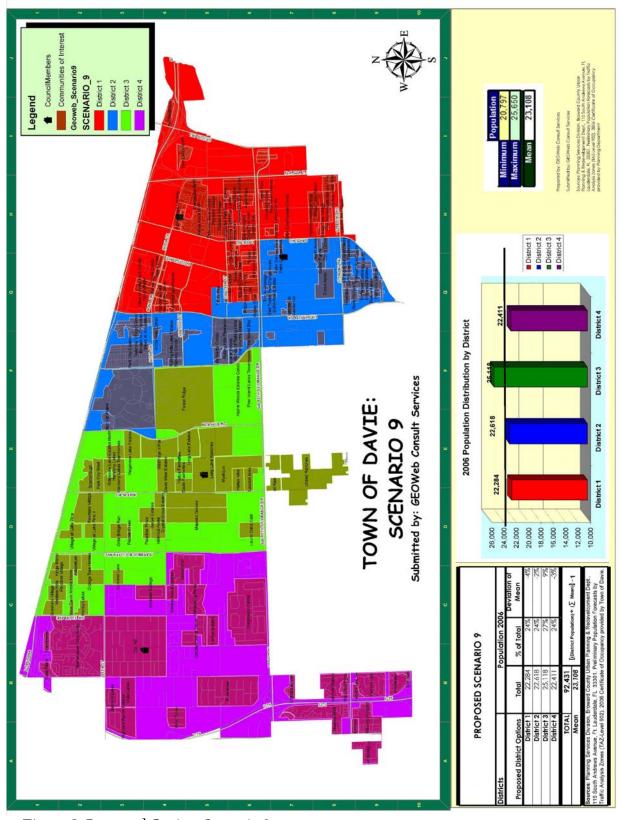


Figure 2. Proposed Option: Scenario 9





### Scenario 10 - Moderate Change Option

This scenario takes into consideration the goal of evenly distributing the population amongst the Districts. The 'moderate' change option, Scenario 10, created by the District Review Committee, is a greater variation from the previous two scenarios in that it redistributes more of the population between Districts. The total population shifted from one District to another in this scenario is 15,487 as opposed to 11,510 in Scenario 8 and 14,492 in Scenario 9.

### <u>Criteria 1 – Population Mean Deviation</u>

As shown in Table 10, population for each proposed District falls within the acceptable +/- 10 percent threshold. In fact, the deviation for all of the Districts falls within +/- 5 percent. Again, the reason for the 'moderate' change designation has to do with the number of persons being shifted amongst Districts.

 Table 10. Proposed Scenario 10: Population Distribution and Deviation of Population Mean

PROPOSED SCENARIO 10 [October 23, 2006]											
Districts Population 2006											
			Deviation of								
Proposed District Options	Total	% of Total	Mean								
District 1	22,479	24%	-3%								
District 2	22,776	25%	-1%								
District 3	24,318	26%	5%								
District 4	22,858	25%	-1%								
TOTAL	92,431	[/District Banculation	Lineatt Z) ÷(c								
Mean	23,108	[(District Population) ÷ (\sum Mean)] -									

### Criteria 2 – Contiguous & Compactness

As shown in the Table 11, when reassigning TAZs from District 2 to District 1, approximately six (6) TAZs were impacted containing 8,758 persons. Of the six (6) TAZs, three of them were deemed 'compact' meaning these TAZs are adjacent to the exiting District boundaries, impacting 4,907 persons. Three (3) TAZs were deemed non-compact, meaning they are not directly adjacent to existing district boundaries. These non-compact TAZs, impacting 3,851 persons, is the same as Scenario 8 and, more than Scenario 9. All TAZs are contiguous in relationship to the proposed boundaries for District 1.

Additionally, when reassigning TAZs from District 3 to District 2, two (2) TAZs were impacted containing 2,658 persons, one of them deemed 'compact' and one deemed 'non-compact'. The 'non-compact' TAZ contains 353 persons.





Based upon reviewing all proposed scenarios, Scenario 10 provides a 'moderate change' in terms of reassigning populations to different districts. Scenario 8 redistributed a total of 11, 510 persons, Scenario 9 redistributed a total of 14,492, and Scenario 10 redistributes a total of 15,487. In this scenario, approximately 4,204 persons reside in 'non-compact' TAZs although they are contiguous in nature.

Table 11. Scenario 10: Compactness Analysis

	SCENARIO 10 - COMPACTNESS ANALYSIS											
Existing	Proposed	Impacted TAZs	# of TAZs	Compact TAZ	Compact Populatio n		Non- Compact Populatio n		Impacted Population			
Distri	ict 2 District 1	556,57,567,568,625,887	6	556,567,625	4,907	557,568,887	3,851	44%	8,758			
Distri	ict 3 District 2	569, 570	2	569	2,305	570	353	13%	2,658			
Distri	ict 3 District 4	59201	1	59201	447	0	0	0%	447			
Distri	ict 4 District 3	57302	7	57302	3624	0	0	0%	3,624			
B: 11 1B:		Impacted TAZs	POP.	1								
	idge District 2 ches District 3	560 615										

### <u>Criteria 3 – District Boundaries coincide as practically as possible with distinct geographic boundaries.</u>

Since the Traffic Analysis Zones were used as the geographic areas and no further TAZs were split, the proposed district boundaries in Scenario 10 coincide as practically as possible with distinct geographic boundaries such as interstates, highways, and local streets.

### <u>Criteria 4 – Proposed District Boundaries respect existing District Boundaries</u>

This option provides moderate changes to existing district boundaries while shifting population between District 1 and District 2. The difference between this scenario and the previous two is the greater shift between District 2 to District 3 and then again between District 3 and District 4. The reassignment of non-compact TAZs to a new District occurs in two more TAZ in this scenario than in the previous two.

### Criteria 5 – Communities of Interest

Communities of interest were defined as residential communities via homeowners association and/or subdivision. As for ethnic enclaves, GEOWeb utilized Census 2000 Redistricting (Public Law 94-171) Summary File which included racial and ethnic information at the census block level. Based upon reviewing the racial and ethnic demographics provided in Appendix A, there were no identifiable ethnic enclave since Hispanic population (20% of total) and other minority populations (5% of total) are dispersed throughout the districts within the Town of Davie.







This option provides moderate change in population distribution but it does not split any communities of interest which include homeowner associations, subdivisions, and 'ethnic' enclaves. Refer to Figure 3.

The District Boundary Review Committee endorsed Scenario 10 as an acceptable option to be presented to Town Council. GEOWeb is submitting this scenario since we deem it to be a moderate change, in terms of population redistribution, compactness & contiguousness, geographic boundary impact, respectfulness of existing district boundaries, and impact to communities of interest.

Based upon the moderate amount of change that evenly distributes the population amongst the districts, but it shifts a greater number of persons from one district to another, it is a recommended scenario by GEOWeb.





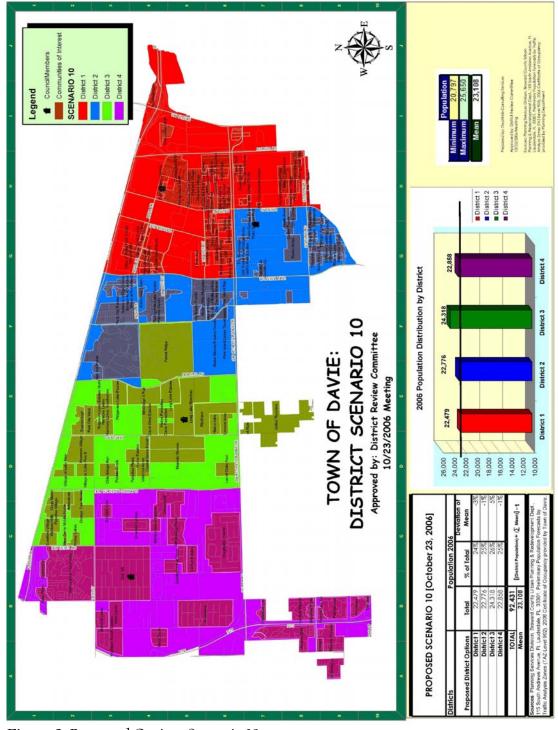


Figure 3. Proposed Option: Scenario 10





### Scenario 6 - Maximum Change Option

This scenario takes into consideration the goal of evenly distributing the population amongst the Districts. The 'maximum' change option, Scenario 6, created by the District Review Committee, is the greatest variation from the previous three scenarios in that it is significantly less compact than any of the other options and the population distribution between the Districts is more than the first two scenarios, although slightly less than the third. The total population shifted between Districts in this scenario is 15,070 and there are changes to each of the four (4) Districts.

### <u>Criteria 1 – Population Mean Deviation</u>

The population for each proposed District falls within the acceptable +/- 10 percent threshold. In fact, the deviation for all of the Districts falls within +/- 5 percent. Again, the reason for the 'maximum' change designation has to do with the number of persons being shifted amongst Districts and that the population is in 'non-compact' TAZs, which is greater than all the three previous options.

Table 12. Proposed Scenario 6: Population Distribution and Deviation of Population Mean

PROPOSED SCENARIO 6										
Districts Population 2006										
			Deviation of							
Proposed District Options	Total	% of Total	Mean							
District 1	22,429	24%	-3%							
District 2	22,826	25%	-1%							
District 3	24,318	26%	5%							
District 4	22,858	25%	-1%							
TOTAL	92,431	(District Population	)÷ (∑ Mean)]-1							
Mean	Mean 23,108 [(District Population) ÷ (∑ Mean)] −1									

Table 12

### Criteria 2 – Contiguous & Compactness

As shown in the table below, when reassigning TAZs from District 2 to District 1, approximately five (5) TAZs were impacted containing 5,790 persons. Of the five (5) TAZs, two (2) of them were deemed 'compact' meaning these TAZs are adjacent to the exiting District boundaries, impacting 807 persons. Three (3) TAZs were deemed 'non-compact', meaning they are not directly adjacent to existing district boundaries. These 'non-compact' TAZs, impacting 4,983 persons, is significantly greater than in all three previous options. All TAZs are contiguous in relationship to the proposed boundaries for District 1.







Also, there is a redistribution of population between District 1 to District 2 in this scenario, which was not done in any of the previous scenarios. Two TAZs are impacted containing 2,551 persons. Of the two (2) TAZs, one is deemed 'compact', containing 1,114 persons and one is not, containing 1,437 persons.

There is also a reassignment of population from District 3 to District 2 impacting 2,658 persons over two (2) TAZs. Of these two, one is deemed 'compact', containing 2,305 persons and one is not, containing 570 persons.

Furthermore there is a reassigning of TAZs from District 3 to District 4 and from District 4 to District 3. This affects two (2) TAZs, containing 4,07l persons, both in 'compact' TAZ designations.

Based upon reviewing all proposed scenarios, Scenario 6 provides a 'maximum change' in terms of reassigning populations to different districts and what is deemed 'compactness'. Scenario 8 redistributed a total of 11, 510 persons, Scenario 9 redistributed a total of 14,492, Scenario 10 redistributed a total of 15,487, and Scenario 6 redistributes a total of 15,070. In this scenario, approximately 6,773 persons reside in 'non-compact' TAZs although they are contiguous in nature.

Table 13. Scenario 6: Compactness Analysis

SCENARIO 6 - COMPACTNESS ANALYSIS											
Existing	g Proposed	Impacted TAZs	# of TAZs	Compact TAZ	Compact Population		Non- Compact Population	%	Impacted Population		
	District 1 District 2	555, 627	2	627	1,114	555	1,437	56%	2,551		
	District 2 District 1	556, 557, 558, 559, 567	5	556,557	807	558, 559, 567	4,983	86%	5,790		
	District 3 District 2	569, 570	2	569	2,305	570	353	13%	2,658		
	District 3 District 4	59201	1	59201	447	0	0	0%	447		
	District 4 District 3	57302	1	57302	3624	0	0	0%	3,624		
		Impacted TAZs	POP.								
Pine Isl	land Ridge District 1	560	5469								
Unite	d Ranches District 3	615	947								

<u>Criteria 3 – District Boundaries coincide as practically as possible with distinct geographic boundaries.</u>

Since the Traffic Analysis Zones were used as the geographic areas and no further TAZs were split, the proposed district boundaries in Scenario 10 coincide as practically as possible with distinct geographic boundaries such as interstates, highways, and local streets.







### <u>Criteria 4 – Proposed District Boundaries respect existing District Boundaries</u>

This option provides maximum changes to existing district boundaries while shifting population between District 1 and District 2. The difference between this scenario and the previous three is the greater shift between District 1 and District 2 and then again between District 2 and District 3. The reassignment of non-compact TAZs to a new District occurs in 5 TAZs in this scenario with a total population of 6,773 persons.

### Criteria 5 – Communities of Interest

Communities of interest were defined as residential communities via homeowners association and/or subdivision. As for ethnic enclaves, GEOWeb utilized Census 2000 Redistricting (Public Law 94-171) Summary File which included racial and ethnic information at the census block level. Based upon reviewing the racial and ethnic demographics provided in Appendix A, there were no identifiable ethnic enclave since Hispanic population (20% of total) and other minority populations (5% of total) are dispersed throughout the districts within the Town of Davie.

This option provides maximum change in population distribution and compactness, but it does not split any communities of interest which include homeowner associations, subdivisions, and 'ethnic' enclaves. Refer to Figure 4.

The District Boundary Review Committee endorsed Scenario 6 as an acceptable option to be presented to Town Council. GEOWeb is submitting this scenario since we deem it to be a maximum change, in terms of population redistribution and compactness.

This maximum amount of change scenario evenly distributes the population among the districts, but it shifts a greater number of persons from one district to another and reduces the compactness of two of the three districts.







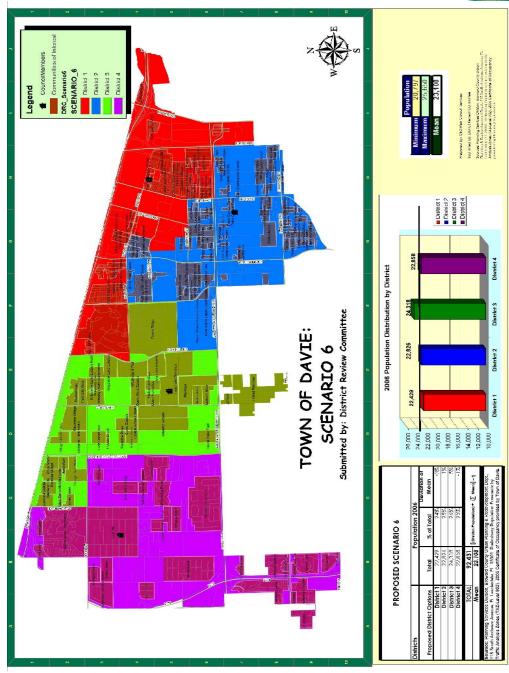


Figure 4. Proposed Option: Scenario 6





#### Public Law 94-171 US Census Population 2000 by Census Block

Appendix A

	P0010001			P0010003		P0010004		P0010005		P0010006		P0010007		P0020002		P0020003	
DISTRICT	2000 Census <sup>(PL94-171)</sup>			White				Native American		Asian		Pacific Islander		Hispanic		Non-Hispanic	
	Total	%	Deviation	#	%	#	%	#	%	#	%	#	%	#	%	#	%
District 1	11,945	16%	-37%	10,310	16%	507	15%	65	35%	249	12%	12	40%	2,874	20%	9,071	15%
District 2	21,397	28%	13%	17,390	26%	1,747	50%	56	30%	723	34%	8	27%	4,648	33%	16,749	27%
District 3	21,410	28%	13%	19,602	30%	460	13%	25	13%	526	25%	4	13%	2,849	20%	18,561	30%
District 4	21,108	28%	11%	18,715	28%	758	22%	41	22%	629	30%	6	20%	3,928	27%	17,180	28%
Total	75,860			66,017		3,472		187		2,127		30		14,299		61,561	
Mean	18,965			87.0%		4.6%		0.25%		3%		0.04%		18.85%		81.15%	
Pine Island Rid	5,214			4936		63		4		78		1		539		4675	
Sunshine Acres	838			731		45		0		29		0		94		744	

Annex Total 6,052
Overall Total 81,912
% Increase 6%

	P	ublic Lav	v 94-17	71: Redist	ricting (	ens	us 2000	- De	mograp	hic F	Profile -	Pos	t Sept 1	5, 20	006 Anne	exatio	on	
	F	P0010001			P0010003		P0010004		P0010005		P0010006		P0010007		P0020002		P0020003	
DISTRICT	2000 Census <sup>(PL94-171)</sup> STRICT		(PL94-171)			Black / African- American		Native American		Asian		Pacific Islander		Hispanic		Non-Hispa	anic	
	•	Total	%	Deviation	#	%	#	%	#	%	#	%	#	%	#	%	#	%
District 1		11,945	15%	-42%	10,310	14%	507	14%	65	34%	249	11%	12	39%	2,874	19%	9,071	14%
District 2		21,397	26%	4%	17,390	24%	1,747	49%	56	29%	723	32%	8	26%	4,648	31%	16,749	25%
District 3		27,462	34%	34%	25,269	35%	568	16%	29	15%	633	28%	5	16%	3,482	23%	23,980	36%
District 4		21,108	26%	3%	18,715	26%	758	21%	41	21%	629	28%	6	19%	3,928	26%	17,180	26%
T	otal	81,912			71,684		3,580		191		2,234		31	Ì	14,932		66,980	П
M	ean	20,478	Per	cent of Total	87.5%		4.7%		0.25%		3%		0.04%		19.68%		88.29%	)

